

Claims

1. Air control system in the front end of a motor vehicle with openings in a front wall defining the front end, whereby cooling air flows into a motor compartment, air ducts being provided which carry the cooling air in the motor compartment substantially against the direction of travel and which are formed by boundary walls running approximately parallel to the direction of the air flow,

characterized in that

the boundary walls (7, 19) are integrated into a body panel (1) which extends in the motor compartment approximately transversely across the air flow direction.

2. Air control system according to claim 1, characterized in that the body panel (1) has, at least partially, ports (6, 10, 11, 18) in the overlapping area of the openings (28, 31).

3. Air control system according to claim 1 or 2, characterized in that the boundary walls (7, 19) project approximately at right angles from the marginal areas defining the ports (6, 18), the free ends of the boundary walls being provided with circumferential sealing flanges (39, 41, 44).

4. Air control system according to claim 3, characterized in that the body panel (1) is arranged mainly behind a bumper unit (21), the bumper unit (21) comprising a bumper covering (27), a flexural crossbeam (25) and a bumper interior part (26).

5. Air control system according to claim 1, characterized in that one of the ports is a large-area upper port (6) above the flexural beam (25).

6. Air control system according to claim 1, characterized in that one of the ports is a large-area, lower port (18) underneath the flexural beam (25).

7. Air control system according to claim 5, characterized in that the lower boundary edge (7) of the upper port (6) of the body panel (1) lies sealingly against the back of the flexural beam (25).

8. Air control system according to claim 7, characterized in that two circular openings (10, 11) are provided on both sides of the upper port (6), from marginal areas defining the openings

9. Air control system according to claim 8, characterized in that two additional circular openings (46, 47) are provided on both sides of the upper port (6).

10. Air control system according to any one of claims 1 to 9, characterized in that at least one outside corner area (15, 16) of the body panel (1) is attached pivotingly to the body panel (1).